

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An elastomer-modified epoxy siloxane composition comprising:
water;
an alkoxy or silanol-functional silicone intermediate;
an amine curative agent;
an epoxy resin; and
an elastomeric resinous intermediate.
2. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 1 wherein the amine curative agent is an aminosilane.
3. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 1 additionally comprising at least one metal catalyst to facilitate cure at ambient temperature.
4. (Original) The elastomer-modified epoxy siloxane composition as recited in claim 1 wherein the elastomeric resinous intermediate is selected from the group consisting of epoxy resins, polybutene resins, polybutadiene resins, acrylonitrile resins, polysulfide resins, and combinations thereof.
5. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 1 wherein the silicone intermediate has a weight-average molecular weight of from 400 to 10,000.

6. (Original) The elastomer-modified epoxy siloxane composition as recited in claim 1 wherein the epoxy resin ingredient is selected from the group consisting of epichlorohydrin-bisphenol A epoxy resins, epochlorohydrin bisphenol F epoxy resins, hydrogenated bisphenol A epichlorohydrin epoxy resins, glycidyl methacrylate resins, glycidyl esters, phenol novalac epoxy resins, resorcinol-modified epoxy resins, and combinations thereof.

7. (Currently Amended) An elastomer-modified epoxy siloxane composition prepared by combining:

water;

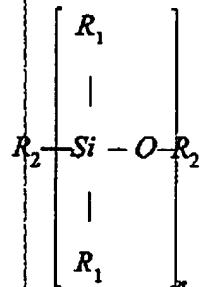
a silicone intermediate selected from the group consisting of alkoxy and silanol-functional polysiloxanes;

an aminosilane;

an epoxy resin having at least two 1,2-epoxide groups; and

an elastomeric resinous intermediate having a functionality selected from the group consisting of hydroxyl, epoxy, isocyanate, carboxyl, mercaptan, and amine.

8. (Original) The elastomer-modified epoxy siloxane composition as recited in claim 7 wherein the silicone intermediate has the formula



where each R₁ is selected from the group consisting of hydroxy, alkyl, aryl and alkoxy groups having up to six carbon atoms, each R₂ is selected from the group consisting of hydrogen, alkyl, and aryl groups having up to six carbon atoms.

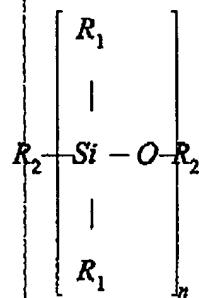
9. (Original) The elastomer-modified epoxy siloxane composition as recited in claim 7 wherein the epoxy resin ingredient is selected from the group consisting of epichlorohydrin-bisphenol A epoxy resins, epichlorohydrin bisphenol F epoxy resins, hydrogenated bisphenol A epichlorohydrin epoxy resins, glycidyl methacrylate resins, glycidyl esters, phenol novalac epoxy resins, resorcinol-modified epoxy resins, and combinations thereof.

10. (Original) The elastomer-modified epoxy siloxane composition as recited in claim 7 additionally comprising at least one metal catalyst to facilitate cure at ambient temperature, wherein the catalyst is selected from the group consisting of zinc, manganese, zirconium, titanium, cobalt, iron, lead, and tin each in the form of octonates, neodecanates, or naphthanates.

11. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 7 comprising in the range of from about 1 to 40 percent by weight silicone intermediate, 1 to 15 percent by weight aminosilane, 5 to 60 percent by weight epoxy resin, and 1 to 25 percent by weight elastomeric resinous intermediate.

12. (Previously Presented) An elastomer-modified epoxy siloxane composition prepared by combining in the presence of water:

a silicone intermediate having the formula



where each R_1 is selected from the group consisting of hydroxy, alkyl, aryl and alkoxy groups having up to six carbon atoms, each R_2 is selected from the group consisting of hydrogen, alkyl, and aryl groups having up to six carbon atoms and, wherein n is selected so that the weight-average molecular weight for the polysiloxane is in the range of from about 400 to 10,000;

an aminosilane;

an epoxy resin having an epoxide equivalent weight in the range of from 100 to about 5,000; and

an elastomeric resinous intermediate.

13. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 12 additionally comprising at least one metal catalyst to facilitate cure at ambient temperature.

14. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 12 comprising from about 0.7 to 1.2 amine equivalent weight per epoxide equivalent weight.

15. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 12 comprising in the range of from about 1 to 40 percent by weight silicone intermediate, 1 to 15 percent by weight aminosilane, 5 to 60 percent by weight epoxy resin, and 1 to 25 percent by weight elastomeric resinous intermediate.

16. (Canceled)

17. (Canceled)

18. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 1 wherein the elastomer-modified epoxy siloxane composition in its cured forms exists as a uniformly dispersed arrangement of epoxy chain fragments that are cross-linked with a continuous polysiloxane chain.

19. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 1 wherein the amine curative agent is an aminosilane that includes at least two active hydrogens, and the epoxy resin has more than one 1,2-epoxide groups per molecule.

20. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 1 comprising from about 0.7 to 1.2 amine equivalent weight per epoxide equivalent weight.

21. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 12 wherein the elastomer-modified epoxy siloxane composition in its cured forms exists as a uniformly dispersed arrangement of epoxy chain fragments that are cross-linked with a continuous polysiloxane chain.

22. (Previously Presented) The elastomer-modified epoxy siloxane composition as recited in claim 12 wherein the aminosilane includes at least two active hydrogens, and the epoxy resin has more than one 1,2-epoxide groups per molecule.